

Last Surviving Flora of the Lower Holmes Run Stream Valley: Cameron Run Regional Park

Rod Simmons

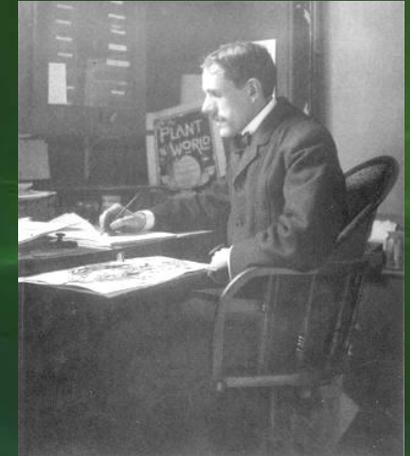
City of Alexandria Dept. Recreation, Parks, and Cultural Activities,
Natural Resources Division, Natural Lands Management Section

March 17, 2017

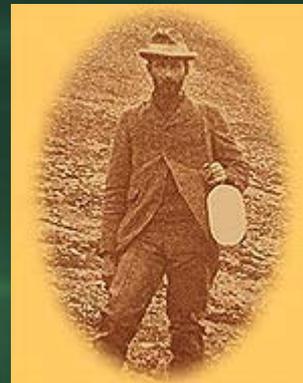
Cameron Mill Race c. 1889. Photo courtesy Alexandria Library, Special Collections



George Vasey



C.L. Pollard



F.V. Coville



Lester F. Ward

Early significant botanical explorers and collectors in Alexandria include J.W. Chickering, Jr., F.M. Comstock, Frederick V. Coville, Dr. Foreman, H.W. Henshaw, W. Hunter, Charles Louis Pollard, Joseph Nelson Rose, Edward C. Steele, G.B. Sudworth, David LeRoy Topping, George Vasey, and Lester F. Ward.

Early Botanical Exploration of the Cameron Run Watershed

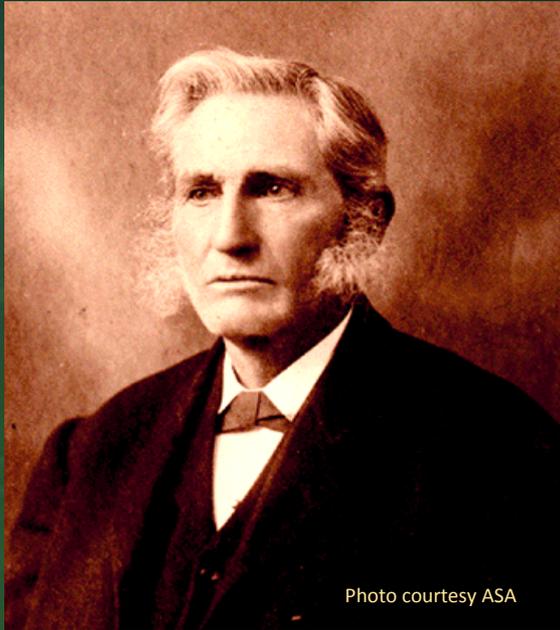


Photo courtesy ASA

Lester Frank Ward (1841-1913), primarily known as a famous sociologist, was also a prolific collector of local flora during his years in Washington, D.C. as a botanist and paleontologist with the U.S. Geological Survey from 1882 to 1905.

Of all the earliest botanical explorers of Alexandria, Ward primarily concentrated on the Cameron Run watershed.

Ward's specimens, largely the earliest collected in the Washington, D.C. region, form the foundation of the DC Herbarium of the U.S. National Herbarium (US) at the Smithsonian Institution, as well as the City of Alexandria Flora.

In 1881, he published a flora of Washington, D.C. and vicinity¹, which included many of his collections from the Cameron Run watershed:

“Passing next to the Lower Potomac, the localities of special interest are...4. Hunting Creek, a large estuary below Alexandria, including Cameron Run, the stream which debouches into it with its tributaries, Backlick Run and Holmes Run, which unite to form it. Here have been found at various points *Clematis ochroleuca*, [*Matelea carolinensis*], *Itea virginica*...*Micranthemum* [*micranthemoides*], [*Platanthera flava*], *Quercus* [*bicolor*], *Carex gracillima*, *Geum* [*laciniatum* var. *laciniatum*], *Galium asprellum*, and very many other rare plants.”

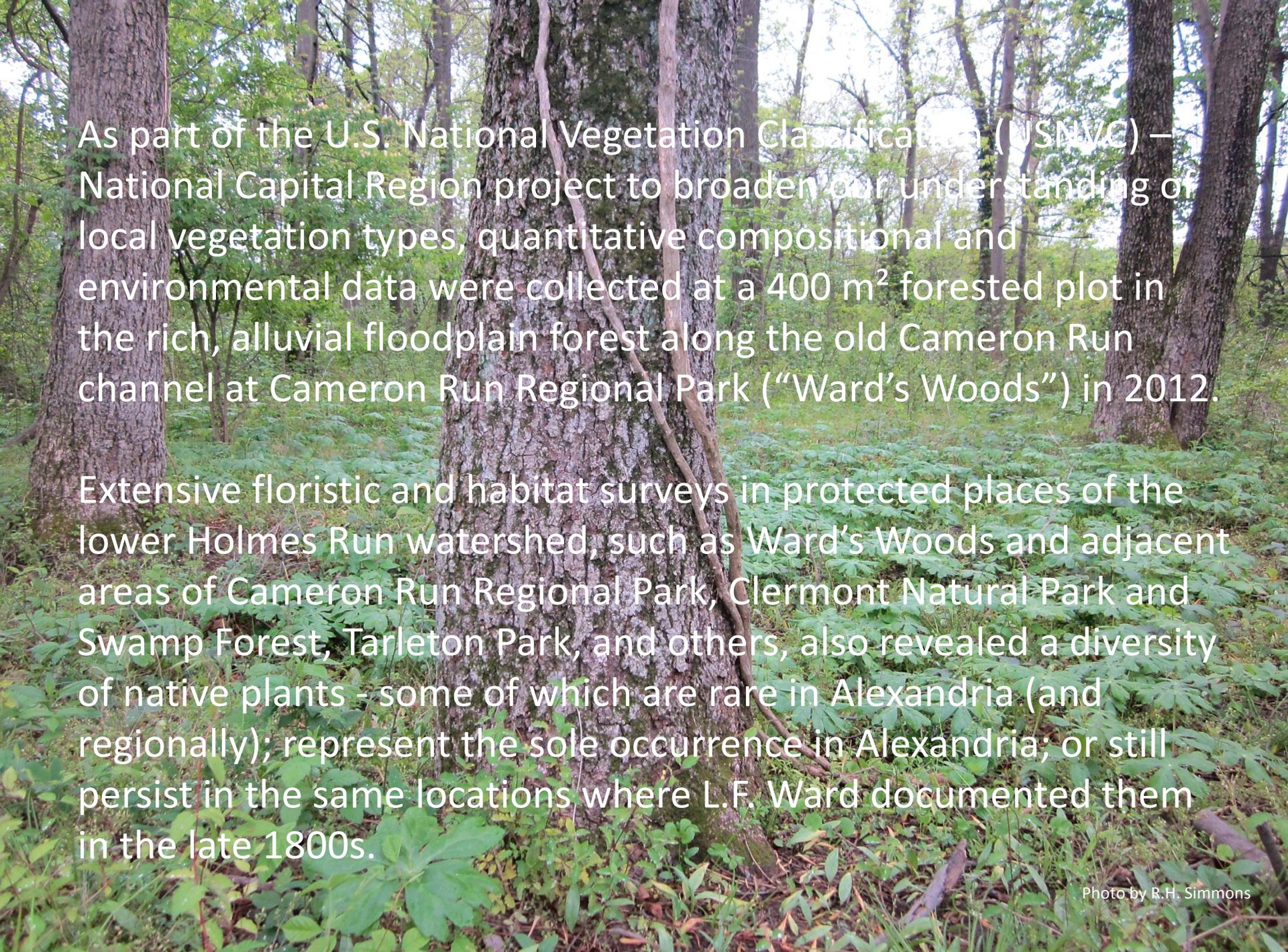
Ward also visited other locales in Alexandria, including the “vast quantities” of Cameron Valley sand (“Rappahannock Series”) that extended westward in the deltaic hills and valley on the north side of Cameron Run (lower Holmes Run), and “Chinkapin Hollow” (Taylor Run ravine at Chinquapin Park) where he collected a freshwater mollusk fossil (*Unio* sp.). He also surveyed the extensive sand and gravel pits in the Franconia region of Springfield, Virginia in the 1890s with William M. Fontaine and documented the exposed paleoflora of the Potomac Formation².

¹Ward, L.F. 1881. Guide to the Flora of Washington and Vicinity. Bulletin of the U.S. National Museum No. 22. Washington, D.C.

²Ward, L.F. 1895. The Potomac Formation. USGS Annual Report for 1893-94.



Vola Lawson Animal Shelter woods (outlined in green); rich bottomland forest (“Ward’s Woods”) along the old Cameron Run channel at Cameron Run Regional Park (outlined in orange); and Cameron Run Regional Park remnant bottomland groves (outlined in yellow)



As part of the U.S. National Vegetation Classification (USNVC) – National Capital Region project to broaden our understanding of local vegetation types, quantitative compositional and environmental data were collected at a 400 m² forested plot in the rich, alluvial floodplain forest along the old Cameron Run channel at Cameron Run Regional Park (“Ward’s Woods”) in 2012.

Extensive floristic and habitat surveys in protected places of the lower Holmes Run watershed, such as Ward’s Woods and adjacent areas of Cameron Run Regional Park, Clermont Natural Park and Swamp Forest, Tarleton Park, and others, also revealed a diversity of native plants - some of which are rare in Alexandria (and regionally); represent the sole occurrence in Alexandria; or still persist in the same locations where L.F. Ward documented them in the late 1800s.

Uncommon to Rare Flora in Alexandria at Cameron Run Regional Park

- Green Dragon (*Arisaema dracontium*) – sole occurrence in City
- Beadle's Oak (*Quercus x beadlei*) – sole occurrence in City
- Swamp Chestnut Oak (*Quercus michauxii*) – sole occurrence in City
- Dutchman's Breeches (*Dicentra cucullaria*) – one of two City stations
- Early Bluegrass (*Poa cuspidata*) – one of two City stations
- Bartram's Oak (*Quercus x heterophylla*) – one of two City stations
- Eastern Figwort (*Scrophularia marilandica*) – one of two City stations
- Flat-spiked Sedge (*Carex planispicata*) – one of three City stations
- Field Thistle (*Cirsium discolor*) – one of three City stations
- Virgin's-bower (*Clematis virginiana*) – one of three City stations
- Yellow Corydalis (*Corydalis flavula*) – one of three City stations
- Bottlebrush Grass (*Elymus hystrix* var. *hystrix*) – one of three City stations
- Potato Dandelion (*Krigia dandelion*) – one of three City stations
- Violet Wood-sorrel (*Oxalis violacea*) – one of three City stations
- Autumn Bluegrass (*Poa autumnalis*) – one of three City stations
- Slender Wedgegrass (*Sphenopholis obtusata* var. *major*) – one of three City stations
- Bladdernut (*Staphylea trifolia*) – one of three City stations
- Foxglove Beard-tongue (*Penstemon digitalis*) – one of four City stations
- Carolina Sedge (*Carex caroliniana*) – one of five City stations
- Canada Moonseed (*Menispermum canadense*) – one of five City stations
- Bloodroot (*Sanguinaria canadensis*) – one of five City stations
- Eastern Redbud (*Cercis canadensis*) – natural populations are rare in Alexandria
- Red Mulberry (*Morus rubra*) – uncommon to rare in Alexandria
- Common Tall Meadow-rue (*Thalictrum pubescens*) - uncommon to rare in Alexandria

Field Thistle (*Cirsium discolor*)



Photo by R.H. Simmons

Potato Dandelion (*Krigia dandelion*)



Photo by R.H. Simmons

Foxglove Beard-tongue (*Penstemon digitalis*)



Photo by R.H. Simmons

Bladdernut (*Staphylea trifolia*)



Photo by R.H. Simmons

Virgin's-bower (*Clematis virginiana*)



Photo by Donald Cameron

Red Mulberry (*Morus rubra*)



Photo by R.H. Simmons

Bottlebrush Grass (*Elymus hystrix* var. *hystrix*)



Photo by R.H. Simmons

Swamp Chestnut Oak (*Quercus michauxii*)



©2008 Will Cook

Beadle's Oak (*Quercus x beadlei*)



Photo by Greg Zell

Bartram's Oak (*Quercus x heterophylla*)



Photo by Andrea Moro

Yellow Corydalis (*Corydalis flavula*)



©2011 Will Cook

Dutchman's Breeches (*Dicentra cucullaria*)



Photo by Jennifer Millwood

Bloodroot (*Sanguinaria canadensis*)



Photo by R.H. Simmons

Violet Wood-sorrel (*Oxalis violacea*)



Photo by Charles Lewallen

Carolina Sedge (*Carex caroliniana*)



Photo by R.H. Simmons

Green Dragon (*Arisaema dracontium*)



Photo by R.H. Simmons

Slender Wedgegrass (*Sphenopholis obtusata* var. *major*)



Photo by R.H. Simmons

Autumn Bluegrass (*Poa autumnalis*)



Photo by Gary P. Fleming

Flat-spiked Sedge (*Carex planispicata*)



Photo courtesy Southeastern Flora

Canada Moonseed (*Menispermum canadense*)



(c) Gary Cote

Early Bluegrass (*Poa cuspidata*)



Photo by Terry Holdsclaw

Eastern Redbud (*Cercis canadensis*)



Photo by R.H. Simmons

Eastern Figwort (*Scrophularia marilandica*)



Photo by A.A. Reznicek

Common Tall Meadow-rue (*Thalictrum pubescens*)



© Richard Migneault
2008

For further information:

Remnant Natural Areas in Parks, Waterways, and Undeveloped Sites in the City of Alexandria, Virginia: Eisenhower Valley at <http://alexandriava.gov/48838>

Native Vascular Flora of the City of Alexandria, Virginia at <http://alexandriava.gov/22560>

Plate 4: Potomac Formation Expanded Explanation at <http://alexandriava.gov/89974>

[DC Herbarium](#)



Acknowledgements:

PowerPoint presentation by R.H. Simmons

**City of Alexandria Department Recreation, Parks, and Cultural Activities,
Natural Resources Division**

**DC Herbarium of the U.S. National Herbarium (US), Smithsonian National
Museum of Natural History; Digital Atlas of the Virginia Flora
(www.vaplantatlas.org/); The Natural Communities of Virginia: Classification
of Ecological Community Groups, 2nd Approximation (2.6)**

**Photos: R.H. Simmons, Alexandria Library, American Sociological Association
(ASA), Google Earth, Donald Cameron, Will Cook, Andrea Moro, Greg Zell,
Jennifer Millwood, Charles Lewallen, Gary P. Fleming, Southeastern Flora,
Gary Cote, Terry Holdsclaw, Richard Migneault, and Tony Reznicek**